# University of Connecticut
# Stem Cell Institute

**Marc Lalande, PhD**
**Director, and**
**Professor and Chair,**
**Department of Genetics and Developmental Biology,**
**School of Medicine**

March 15, 2010

Testimony of University of Connecticut Stem Cell Institute to Connecticut General Assembly's Appropriations Committee regarding the Governor's recently revised Deficit Mitigation Plan.

Representative Geragosian and distinguished members of the committee, thank you very much for allowing me to address the proposal to reduce the 2010 funding for Connecticut Stem Cell Research. The State of Connecticut's support and funding of the Stem Cell initiative has not only propelled our state to the forefront of research to cure of human diseases and repair damaged tissue but it has also created a new economic engine.

In the short time since stem cell research funds were first disbursed in April 2007, the University of Connecticut has been awarded $20.8 million, an amount that leads all other Connecticut entities. The funding from these awards provides support for 115 scientists from 47 laboratories across the University of Connecticut. The bottom line is that the stem cell program has created and maintained employment for 40 full-time equivalents. To postpone the State's funding program at this juncture would threaten our ability to recruit and retain the highly qualified personnel needed to maintain our international standing in stem cell research.

There are two very important reasons for to retaining and recruiting highly trained scientists with unique expertise in stem cell research in Connecticut:

1) Collaborations with private companies have begun to blossom in the past year. The $52 million renovation of a facility to house the University of Stem Cell Institute is scheduled for occupancy in the summer of 2010. This new facility includes a stem cell Technology Incubator Program (TIP) with space for six biotechnology companies. Two stem cell companies, including Cryotooth that has moved from Vermont, have already joined the TIP. Cryotooth will work with UConn stem cell scientists to brain and other cell lineages from dental pulp stem cells. A UConn research team funded by the CT stem cell research program has recently filed a patent application on their work to derive cartilage from human embryonic stem cells and are planning to establish the first stem cell spin off company at the new TIP facility. Also, $500,000 of federal funding has been secured to support and expand the research infrastructure needed to attract stem cell high technology companies. The possibility of applying for funds from the Connecticut stem cell program is hugely

attractive for such companies and postponement of the State's funding program would send the wrong message to stem cell biotechs considering relocating to our TIP.

2) There was very little stem cell research at the University of Connecticut prior to the launch of the stem cell research initiative. Prior the State's initiative, federal extramural funding amounted to less than $275,000. Since 2007, extramural federal awards have grown to $2.9 million, and we expect this amount to continue to grow and further contribute to the return on investment of Connecticut's stem cell program. Postponement of the funding program now will halt the upward trend in our federal awards since we will not have the seed money to attract our best investigators to stem cell research.

The success of the University of Connecticut's stem cell research program is entirely due to the foresight and generosity of the Connecticut's people and its legislators. With State support, we recruited Dr Ren-He Xu and other experts from Wisconsin to staff our core facility and create Connecticut's first four human embryonic stem cell lines. Two of these, CT-1 and CT-2, await final approval for inclusion in the Federal registry. UConn's scientists have published over 45 articles in the world's top stem cell journals. One of the recent publications describes the use of human pluripotent stem cells as a potential vaccination against colon cancer. The application to continue this groundbreaking research is only one of forty-four that have been prepared and submitted by our scientists to Connecticut's 2010 grant program. Postponement of the funding program will greatly jeopardize the progress that UConn investigators are realizing towards stem cell therapies for human diseases.

Sincerely,